●105 This economic adaptation of the Tübatulabal to the resources of their area is peculiarly interesting. Lacking all knowledge of agriculture, the Tübatulabal used as staple vegetable foods the natural products of two, rather than one, culture areas--the acorn of California and the piñons of the Great Basin. Similarly, their flesh foods were a combination of two varieties of wild game--the deer of California and the rabbits of the Great Basin, together with an appreciable use of fish that is more characteristic of California than of the Basin. Taken by and large, as far as the food quest was concerned the Tübatulabal might have been transplanted either over the crest of the Sierras eastward a few miles into the Great Basin desert area, or an equally short distance westward into the Great Valley of south-central California, and they could have adapted themselves with a minimum adjustment in food-gathering techniques to the resources of either of these natural areas. But there were also many varieties of plants available to the Tübatulabal within their region, of which they made no use; a few of these are listed in the following monograph. Such a list illustrates, in concrete fashion, the negative response of Tübatulabal culture to part of the floral environment and indicates selective processes at work, even in this simple culture, which materially affected the responses that the environment elicited.

In obtaining some of their foods, the Tübatulabal displayed an ingenuity that is only fully revealed when all the details of the techniques are considered. Few botanists perhaps realize
[171] that the honey dew deposited by aphids on the stalks of the common cane is capable of being collected in sufficient quantity to be made into sugary cakes, and that this was regularly done among such groups as the Tübatulabal, the Surprise Valley Paiute,[3] the Owens Valley Paiute,[4] and the more distant Yavapai and Papago groups.[5] Or that the minute saline crystals which dry weather brings out on the stems and leaves of salt grass can also be obtained in quantity, by using a technique similar to that employed for beating the honey dew off canes. Yet the Tübatulabal have been treating salt grass thus for generations, and have not yet lost their taste for this pungent plant product. Nor have they ceased to appreciate other of their "luxury" plant manufactures, including a native chewing gum, which is

[3]Kelly, 103.

[4]Steward, 1933, 245.

[5]Yavapai and Papago (Gifford, correspondence).

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●105 made from the milky sap of a species of Asclepias that is run into hollow sections of the stalks of an Eriogonum species and laid on hot ashes until the sap congeals; the resulting masticatory excels, in native estimation, any variety of "store gum" that can now be obtained.

The treatment of tobacco by the Tübatulabal also follows along unusual lines. Fortunately, I was able to watch the tobacco process from beginning to end; this was most opportune, since the Tübatulabal are among that compact group of central and southern California tribes* who use tobacco in a peculiar native form. It is true that they smoke it occasionally, as was done over so much of North America; but mainly they chew or "eat" it mixed with lime, and before the tobacco can be consumed thus, it undergoes a lengthy and varied treatment. Access to the plant is easy to the Tübatulabal, since large patches of two species of tobacco grow wild in their area; the plants are not used, however, without expenditure of some care upon them during the growing stage. Wild tobacco plants are partly deleaved and rid of their side shoots at regular intervals before the artificially enlarged leaves are finally gathered; tobacco thus occupies, among the Tübatulabal, the unique position of being the only plant upon which any effort was expended to better its natural growth. The curing of the tobacco also follows along what may seem to us novel lines; the shredded green leaves are rolled up inside bundles of leafy willows, after being sprinkled with water and the broken meats of Digger pine nuts; these willow bundles are then laid out in the sun for several days so that the tobacco inside them may cure. The tobacco is then dried, pulverized, and made up into balls. As for the lime that is eventually mixed with the tobacco just before it is consumed, some of it was obtained from burnt shells, but much of it was and still is dug from natural deposits. Digging lime thus and slaking it with water after burning it is said to have been an aboriginal procedure, though there is room for doubt concerning the accuracy of this latter statement.

The adjustment the Tübatulabal had made to their habitat entailed an appreciable amount of seasonal shifting about from one locality to another in order to take advantage of those natural resources which the region offered. During the winter and early spring they lived in small hamlets situated either on the floor of the valley or in the foothills that rim the flood-plain valley. In summer and early fall family groups moved higher up into the mountains, to fish, hunt small game, and gather piñons. In late fall groups journeyed westward to harvest the yearly supply of acorns, before returning to the hamlets for the winter. Each season had its food gathering and other economic activities

*See tabulation on distribution of tobacco, and the general paragraph about distribution elsewhere (p. 38).

●105 peculiar to it; the period of greatest leisure was encompassed by the winter months. This was the time when the day's work was short, and of no great moment, when stored acorns and piñons, dried fish and flesh, were relied on for food, when long nights could be whiled away in story telling and making ingenious string figures that represented such well-known mythological characters as Hawk flying, or Bear in a house.

During the heat of summer both clothing and housing were at a minimum among the Tübatulabal. Men often went naked; in colder weather men and women wore knee-length double aprons made of tanned deerskin, crude leather shirts, and rabbitskin blankets draped over their shoulders. Women were tattooed slightly, and sometimes applied red paint to their faces as a bleach to lighten the skin. Both sexes ordinarily went hatless; when traveling they wore clumsy fitting moccasins, but mainly went about barefoot. Rawhide sandals were used, but only for a special purpose; men wore them when tending the crackling brush fires on which piñon cones were piled in order to force open the scales of the cones. During the summertime a willow roof, supported by four crotched poles and usually lacking side walls, served as the principal form of shelter. On piñon expeditions several families camped together, sleeping inside a circular brush enclosure, such as was also often used for dances. Hunters often utilized dry cavern-like recesses between two huge boulders for a night's lodging in the mountains. What care the Tübatulabal gave to house building was mainly expended on the domed tule- and brush-covered houses they occupied during the winters. When such a house was to be built, the man of the family obtained the willow poles and set them up in the form of a circular framework; his wife and children collected the tules to cover this framework. Such a division of labor was typical for the Tübatulabal. Men performed the more strenuous, but often irregularly recurrent tasks; women's labor involved a daily routine of duties that were time-consuming, but less strenuous than those of the men. It was always a man's work to handle the bow, woman's to make use of the pit mortar in which acorns and seeds were pounded. This matter was decided long ago, in a contest held during the mythical age, when all the birds and animals were human in form and lived as human beings do now. The humorous series of events that led to the contest arranged by Coyote which set this precedent for the division of labor are narrated in a well-integrated myth given in full in the following monograph. This myth is known at present only for the Tübatulabal, but variants of it will doubtless be found to occur in the mythologies of neighboring tribes when these mythologies become better known.

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Besides her work connected with gathering and preparing plant foods it was also woman's task to weave the several varieties of twined and

105 462 coiled baskets that she used as implements and food containers, and to fashion the few pots used in cooking. Her basketry work was often as fine and well-executed as her pottery was coarse and crude. Some women even went so far as to play with their technique in basketry making, and fashioned coiled jars out of long strands of strung piñons, while camping at the piñon grounds. These "piñon jars" were made in a coil technique, and were similar in shape to the small-mouthed, round-shouldered display type of jar that the Tübatulabal used to keep their clamshell disk currency in. After being made, a piñon jar was filled with loose nuts and brought home from the piñon grounds; eventually it and its contents were shelled and eaten.

105 That the Tübatulabal, in common with a few Yokuts groups, the Western Mono, and the Owens Valley Paiute, had pottery at all is somewhat of an anomaly; as a usual thing people engaged in a seminomadic, hunting-gathering type of culture lack pottery, or if they make it, have obviously borrowed the trait from near-by groups having a more complex culture. Concerning the crude gray-black unpainted ware made by Tübatulabal women, one guess about its origin might be that pottery making was a trait borrowed by the Tübatulabal from certain southern Californian groups with which the Tübatulabal have had trade contacts since early historic times at least. This facile explanation with its "common-sense" basis falls wide of the mark, however; investigation of the problem analytically soon establishes the fact that Tübatulabal pottery differs markedly from that of southern California. That the pottery-making complex as practiced by the Tübatulabal probably derived ultimately from the Southwest was suggested several years ago by Dr. Gayton;[7] a recent study of the distribution of the practice of molding and baking clay artifacts in western North America made by Heizer offers convincing evidence in support of Dr. Gayton's assumption. From northern Arizona to central California there is an almost unbroken line of continuous distribution of true pottery ware;[7a] this shows whence Tübatulabal pottery derived.

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The trips the Tübatulabal made beyond the borders of their own area led them, in early historic times at least, to points a hundred miles or more west and southwestward, and somewhat shorter distances north and eastward. Men and women went on such trips, afoot, in couples or in small groups, to trade and obtain certain natural resources they had need of, that their own area lacked. Being mainly at peace with their immediate neighbors, the Tübatulabal were able to pass through alien territory with a minimum of risk from sudden attacks. By a system of silent trade they exchanged the piñons, balls of prepared tobacco, and other commodities they had brought with them, for lengths of white clam-shell disks which passed as currency among all

[7]Gayton, 1929, 250. [7a]Heizer, 44.

●105 the tribes of this region. Nor did the Tübatulabal traders hesitate to avail themselves gratis of commodities which could be gathered on such trips and put to good use after they had returned home. For example, they picked up lumps of asphaltum on the beach when they visited the Ventureños, and brought them home to be used for a variety of purposes.

The Tübatulabal also traded among themselves; toward the end of winter, especially, dried deermeat might be much in demand; chia seeds, yellowhammer-quill bands, fine baskets, etc., each had a fixed price in the standard lengths of imported clamshell disks used as currency. There were even loans made in this currency, but no interest was charged on such. There were many other ways in which this currency was also used, besides its trade uses. Short lengths of clamshell disks were distributed to visitors arriving from afar for a "big fiesta" or mourning ceremony; they were used to pay the singers and dancers at such a fiesta; strings changed hands frequently during the gambling games that accompanied a fiesta; and lastly, loose clamshell disks were scattered in quantity among the crowd of wailing people circling the fire during the burning of the tule image that culminated a mourning ceremony. At "little fiestas" or face-washing ceremonies, given to absolve mourners from the taboo that enjoined their abstaining from meat after the death of a near relative, money jars full of currency were put on display, and their contents given to certain persons who washed the faces of the mourners before the latter could join in the feast which was served as part of the fiesta. Lastly, the familiar disks were also put to ornamental use, women and girls wearing necklaces, earrings, and bracelets made from strings of clamshell beads.

If a man possessed a large amount of this currency, he stored it, carefully coiled in long lengths, in sacks made of the entire skin of antelope, mountain sheep, or deer. These sacks he hid in some well-concealed crevice on a boulder-strewn slope of the foothills, telling no one where his cache was situated. In event of sudden death, his wealth remained hidden, its whereabouts unknown to his relatives, who might search for it assiduously, but fail to find it. If, however, either in a wealthy person's lifetime or after his or her death, a relative or even a non-relative stumbled by accident on such a cache, it was "finders keepers," and the currency passed into new hands.

Possession of wealth in the form of this native currency was also a factor entering into the selection of a new "chief" or headman, although descent and the character and abilities of the candidate were also taken into consideration by the small group of old men who met from the various hamlets to choose the chief. These old men did not constitute a formal council, nor was the office of chief itself an institution of

●105 any sharply defined formality, yet, nonetheless it entailed upon the man who held it certain judicial and administrative duties, gave him a certain prestige among his fellowmen, and constrained him to observe certain rules of etiquette, none of which latter was, however, of a very onerous nature. "A man with a good heart," who was at least middle-aged, and who preferably possessed some wealth and was related by blood, either paternally or maternally, to a former chief, would be the sort of person the old men would choose. Such a man might expect to occupy the position of chief among the Tübatulabal for life, once he were selected. If, however, his conduct became unseemly during his incumbency, he could expect to have criticism leveled against him publicly during fiestas, to have his decisions disregarded, and finally to be supplanted by another chief whom the old men had chosen.

How large a group did a chief represent and serve? We shall never be able to state, with absolute accuracy, the answer to this question, except for the present time; the total population of the Tübatulabal now, including mixed bloods and individuals who have moved out of the area as well as those who have remained in it, numbers 145 persons. But in aboriginal times, just prior to white settlement of the area, the Tübatulabal and a closely related band, the Palagewan, probably numbered between 300 and 500 individuals. Using a system of checks and counterchecks discussed in detail in the following monograph, the above-mentioned figure seems to be as close an estimate as can now be made of the aboriginal population for the Tübatulabal proper and the now-extinct Palagewan. Together these two groups occupied a mountainous area of some 1300 square miles; much of this area was visited only occasionally, during a few brief months in summer, by individuals from the two bands; a goodly part of it may not have been traversed at all, from one year's end to the next. To say, then, that the Tübatulabal-Palagewan population averaged one person per every 3-5 square miles is somewhat misleading, for the population of these two groups actually centered in the southern third of their territory, within an area of about 500 square miles. This makes the population, for the southern third of the area, 1 person to every 1 or 1.6 square miles.

Both the Tübatulabal and the smaller Palagewan bands were essentially aggregates of a number of tiny hamlet groups; each of these hamlets consisted of from two to six household groups which were, in turn, comprised of the members of a single biological, bilateral family, plus one or two other relatives, such as widowed children or parents, or orphaned nieces or nephews, etc. Sometimes a son and his wife, or a daughter and her husband, might also be included in the household. The members of the household groups comprising a single small hamlet were generally all interrelated by blood, either matrilineally or

105 patrilineally; this made the hamlet groups exogamous units, since the Tübatulabal regarded the marriage of lineal or collateral kin with extreme aversion, as one of the worst deeds of which human beings could be guilty. There was, however, no formal rule of local exogamy between hamlets, nor were there any other exogamic units, such as clans, phratries, or moieties within the structure of this simple society. The personnel of hamlet groups varied somewhat from year to year; families shifted their residence from one hamlet to another, often for very trivial reasons.

If a bride had been paid for, residence of a newly married couple was patrilocal; if a man served the bride's parents in lieu of paying for their daughter, post-marital residence was matrilocal for a few years. In itself, marriage was a simple enough affair; after the first child was born, the young couple generally moved into a house of their own, often situated near the groom's parents' house. For some women childbirth was easy, for others extremely difficult; if a woman were sterile she might be given herb concoctions in order to overcome this undesired condition. During a particularly difficult birth various efforts would be made to relieve the parturient's pain and cause the child to be born quickly; a person possessing an amulet having supernatural power might rub this over the woman's body. Breech presentations were prevented by holding a pregnant woman suspended upside down, with her head hanging downward, for such time until the baby had reassumed a normal position within the womb. After childbirth mother and infant lay on a warm pit for several days.

No puberty ceremonies were held for a girl when she experienced her first menses, nor were there any group initiation ceremonies for adolescent boys. Women ate neither "meat nor grease" during their menstrual periods; and since most of the salt that was procured from the salt lakes on the desert was used to cure meat and fish, and was never used to season acorn mush, the taboo against meat also included an implicit one against salt.

A girl's mother or grandmother instructed young girls in womanly matters, since there was no formal puberty ceremony. The lack of a boys' initiation ceremony likewise put the burden of responsibility for a boy's education on his father or grandfather or some other old man of the group; at sundown old men often lectured to youths about hunting customs, and how they were to behave. But the greater part of a boy's or girl's education consisted in imitation of the acts of his or her elders, with whom they were constantly associated from babyhood onward, except during such times as their parents left them with near relatives and went off on trips that were too strenuous for young children to take.

All misfortune, especially sickness and death, was (and still is) attributed either directly or indirectly to witchcraft. Witches were born to

●105 follow their profession, and had certain supernatural guardian-helpers, such as Coyote, to aid them in their nefarious designs against such persons as had incurred their ill-will. The native term for a shaman is a·ɣowa·l; women might have shamanistic power as well as men, but there were noticeable differences as to how members of the two sexes exercised it. A male a·ɣowa·l could either sicken a person, or cure him of sickness, whereas a woman a·ɣowa·l could only use her power for evil. "Bad" a·ɣowa·ls, women and men who use their power only for giving people "hard luck," are the most feared members of the community; the Tübatulabal gossip about them in low tones and see every misfortune as a result of their malice. The deeds of evil shamans often caused the latter to meet a violent end; exasperated members of the community would first obtain permission from the chief, and then kill such individuals. Curing shamans were on the other hand respected and their prestige grew as the number of cases they cured mounted, just as it dwindled and they became suspect of evil designs when they failed to cure patients. A curing shaman devoted an entire night to ministering to his patient; he danced, sang, and sucked at the affected spot in an effort to extract the disease object which had been injected by witchcraft and was causing the illness. During the night's performance the shaman's animal helper arrived from afar off and advised the shaman how to treat the patient. Any number of persons might witness a curing performance, but the shaman conferred with his supernatural helper privately, outside of the house where the cure was taking place. After extracting the disease object, which often looked like a spider, worm, or clot of blood, the shaman oftentimes gave his patient certain practical advice, such as to move from the dwelling house where he was staying, or to take certain herb medicines. Sometimes a doctor divulged the identity of the witch who had sickened his victim; he always knew, just as he knew who had stolen anything, or where lost objects could be found; if, however, the witch was a relative of his he was likely to shield him or her.

Various herb medicines were also used to treat illness; the plants used were many, but jimsonweed (Datura meteloides) was preëminent among them. Jimsonweed was once a man, who, when he died, told the people to dig his roots if they were in need of help; therefore, before a Tübatulabal digs the roots, he makes a short speech to the plant.

Not only was jimsonweed taken medicinally for various disorders, and used as an anodyne, but young men and women who were past puberty were urged to drink a decoction made from the roots, [776] in order to obtain supernatural guardian spirits and "long life." Small groups of young people who had decided to take jimsonweed were put under the charge of an old man who knew how to ad-

●105 minister the drink, and were not permitted to eat or drink anything for three days; on the evening of the third day they were given a long draft of the jimsonweed drink, and soon fell into a stupor from which they awakened some 12 hours later. During this stupor various animals appeared to some of the vision seekers; these animals became the seekers' "pets," taught them songs, and told them how to obtain amulets, which contained magical properties that protected the wearers from harm. The drinking of jimsonweed was not obligatory for all members of the group, and the drink was never administered in summertime for any purpose whatsoever, since in the heat of summer people could not abstain from water for three days, and if they drank water and then drank jimsonweed they were likely to become bloated and die.

Live ants, wrapped in small balls of eagle down, were also administered to individual vision seekers, as well as to persons suffering from various ailments; the effect produced when the ants bit the lining of the stomach was similar to that produced by drinking jimsonweed.

Besides the jimsonweed ceremony, to which only a minimum of ritual was attached, two other ceremonies were held sporadically among the Tübatulabal; both of these were connected with death. Burial itself was effected with little ceremony; immediately after a death occurred the relatives of the deceased assembled at the house and spent the ensuing night in wailing; the next day the corpse was taken up in the hills and deposited in a shallow grave underneath a huge boulder. The mourners then dispersed. From three weeks to six months later, certain relatives of the deceased, who after the death had not been permitted to eat meat, had their faces washed by one or more friends, whom they paid liberally for this ritual act. If there occurred later a death that obliged one of these same face-washers to undergo the meat taboo, he or she had his face washed by the same person for whom he had previously performed this service and, theoretically at least, paid the former as much as he himself had previously received. Sometimes the return payment fell short of the original, sometimes exceeded it, but some payment in currency was always made. After the face-washing ceremony everyone sat down to a feast, at which the mourner broke his or her fast and ate meat. To partake of any flesh food before the taboo was thus removed was equivalent to eating of the corpse itself, and constituted an insult to the deceased which might be avenged by witchcraft.

A year or so after the death of a person, a "big fiesta" was held, if the relatives of the deceased were sufficiently enterprising and possessed of wealth enough to hold such a ceremony. This mourning anniversary was a six-day affair, to which visitors from other tribes were invited; it entailed the collecting of a large amount of food on the part of the person giving the ceremony,

●105 and encompassed a variety of social activities. Dances were held during the nights of the fiesta, gambling games played night and day, and shamans held competitive "shooting" contests. Before daylight on the last night of the ceremony a tule image of the deceased, and all of his more prized possessions that had not been burned or destroyed immediately after his death, were cast into the flames of a large fire around which the people milled, wailing and crying. The widow or some other relative of the deceased threw shell currency and packets of piñon seeds and other goods into the crowd, and there was a lively scuffle on the part of the visitors to obtain as much of this largesse as possible. After the fire had died down the "big fiesta" was at an end, and the visitors soon left for home.

The souls of the dead lived in a land which lay toward the west; there is a "true story" which the Tübatulabal tell, of a man who once visited this region in search of his dead wife. The wide distribution of this myth, which resembles the Old World tale of Orpheus and Eurydice, over all of North America has recently been pointed out by Dr. A. H. Gayton.*

Sometimes, however, ghosts travel about on earth inside whirlwinds; occasionally they appear to vision seekers, and are held in high esteem by persons so fortunate as to obtain them for their guardians; sometimes they are sent by witches to sicken people. A variety of other spirits lived in the springs, streams, caves, and mountains of the region; most of these were conceived of as human in form, often dwarflike; they were not especially feared, but the Tübatulabal either tried to conciliate them, or fled from their presence when they encountered them. A concept of a supreme deity was lacking, but in the beliefs concerning jimsonweed there is an echo of the dying-god concept found in more pronounced form in southern California.

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171 On the whole, Tübatulabal culture was of the borderline variety, showing affiliations in its material, social, and religious aspects with the Great Basin, (South) Central California, and Southern California cultures. Some of the traits which the Tübatulabal share with tribes in these three areas may be briefly indicated; among traits shared with Basin tribes are the use of piñons, a Great Basin staple, the pitched water bottle, use of honey dew for sugar, the wooden frame cradle, the carrying net, the eagle-down dance skirt, the lack of clans, moieties, or totemism, the classification of cross and parallel cousins with brothers and sisters, the walnut-shell dice game, the round dance, the ceremonial brush enclosure, a belief that the milky way is dove's fire, the belief in water spirits, and so forth. As Dr. A. H. Gayton has recently shown, Tübatulabal mythology is predominantly of Great Basin caste (Gayton, 1935a, 588, 595). Our

*Gayton, 1935b, 266.

[p. 6(a)]

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171 knowledge of the Basin cultures is as yet incomplete, so that the foregoing list of traits cannot be taken as a basis for the relative weighting of Basin influences, as against California ones, on Tübatulabal culture. Also, several of the above-mentioned traits, such as the ceremonial enclosure, the wooden frame cradle, walnut-shell dice games, are also found among South Central and Southern California tribes, but, because they probably have had their provenience in the Basin (Kroeber, Handbook, 535, 540, 655), they are included in the foregoing list.

Some of the (South) Central California traits noted for the Tübatulabal are the rejection of all reptiles as food, looped stirrer for acorn mush, chewing of tobacco with lime, shell lime, leaching buckeye nuts, the bottleneck type of basket, bride purchase, clamshell money, unit of measure of such, and name for unit, mourning ceremony, clown, meat taboo with reciprocal washing and payments, swallowing of ants wrapped in eagle down, etc. This list could be appreciably extended, but has not been because of the lack of comparable material from the Basin.

Among the Southern California traits interwoven into the fabric of Tübatulabal culture are the use of asphalt, the coiled basketry cap, presence of steatite objects in area, the dying-god concept connected with the taking of jimson-weed, the application of lighted balls of furze to cure rheumatism, and, in historic times, the introduction of the horse. Direct contact with the Southern California Chumash is known to have occurred after the founding of San Buenaventura mission; whether there was much contact between the Tübatulabal and the Chumash before that time is questionable and seems, judging by some of the traits enumerated above, improbable.

[177] From their contacts with tribes in the three areas mentioned above, the Tübatulabal borrowed, altered, and reshaped cultural traits, and gradually built up their own unique culture, the outlines of which as it existed at the beginning of the historic period have been only too imperfectly sketched in the following pages.

Turning now from the consideration of cultural elements shared by the Tübatulabal and their ethnic neighbors, the question arises whether there are any traits peculiar to the Tübatulabal alone, which can be assumed to have been formed within the group. Here our conclusions are always subject to revision by the addition of new data, but three traits deserve at this time specific mention. They are: the obtaining of lime from natural deposits, for chewing with tobacco; the manufacture of bottleneck-shaped jars from strung piñons; and the myth accounting for the sexual division of labor. None of these traits has been reported as occurring among tribes of the surrounding areas. But if we consider each of the three, we find that the claim of each to absolute uniqueness among the Tübatulabal is not free from doubt. The more usual way in which to obtain lime

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for chewing with tobacco, among California tribes, was to pound up calcined shells. This method was known to the Tübatulabal and practiced by them. There is a good probability that the method of obtaining lime from natural deposits began before the whites actually settled in the Tübatulabal area, but that it was learned by the Tübatulabal from the Koso, some of whom settled, in early historic times, in the area in which the Tübatulabal procured lime from the ground. The Koso could have learned this method from white prospectors who penetrated their area to the east of the Tübatulabal at a comparatively early date. Furthermore, when we consider that slaking the burned lime with water was also claimed by the Tübatulabal to have been an aboriginal process, our suspicions concerning the trait mount. The question, then, must remain an open one at present.

The second trait, that of making jars from strung piñons, seems to have more in its favor in a claim to aboriginality. But another factor merits consideration; the jars are said to have been made in the same shape as the Tulare bottlenecks, so that what we are dealing with here is the transfer of part of a technique into another medium, rather than a totally new trait. If the jars had had a distinctive shape of their own, that, plus the fact they were made with non-basketry materials, would have strengthened their claim to originality, despite the consideration that the idea is obviously a readaptation of the coiled basketry technique. But as it stands, the only novel feature of the piñon jars is that they were made with materials which differed markedly from those generally used in basketry.

In regard to the myth, there is little need to conjecture. It bears too definitely the stamp of aboriginal Basin mythology, details concerning which we know as yet very little, to be the product from beginning to end of a single people,

[p. 7(a)]

105 and to be restricted solely to that group. No
171 myth collection taken from any primitive group can hope to be all-inclusive for the mythology of the entire group, and this myth has by accident doubtless been previously overlooked, both by native raconteurs and by ethnologists when they have been engaged in myth taking. The approximate distribution of the myth, when known, will be of interest, and if it is found in only one or two other tribes, with its recording will go the last unclouded claim that could be put forward for the unique character of any trait in Tübatulabal culture.

METHOD OF STUDY

101 The following ethnographic study of the Tübatulabal, a Shoshonean-speaking people of the southern Sierra Nevada foothill region of California (fig. 1), is based on field work done
[122] near Weldon, Kern county, in the summers of 1931-
115 33 on funds provided in part by the Board of Research of the University of California. My chief

115 informants were Steban Miranda, aged 86 (father 1/2 Tübatulabal, 1/2 Palagewan; mother Tübatulabal) and Frances Philips, 68 (father Tübatulabal, mother Koso). Mrs. Estefana Miranda Salazar, 40 (father Tübatulabal, mother Yokuts), interpreted for her father, and Mrs. Legora Tungate, 45 (father Tübatulabal, mother 1/2 Tübatulabal, 1/2 Koso), for her mother, Mrs. Philips. Other informants and interpreters were Petra Nichols, 89 (father Tübatulabal, mother Palagewan); Mike Miranda, 45, Steban Miranda's son and full brother to Mrs. Salazar; Frank Chico, 30 (father Tübatulabal, mother Koso); Fernando Miranda, 47 (father Mexican, mother Tübatulabal); Rosie Pablo, 45 (father Yokuts, mother Tübatulabal); Susie Williams Nieto, 48 (father Kawaiisu, mother Tübatulabal).

[p. 7(b)]